

(19)日本国特許庁 (JP)

(12) 公開特許公報 (A)

(11)特許出願公開番号

特開平6-63077

(43)公開日 平成6年(1994)3月8日

(51)Int.Cl.<sup>6</sup>

A 61 F 13/58  
5/44

識別記号

庁内整理番号

F I

技術表示箇所

H 7108-4C  
2119-3B

A 41 B 13/02

J

審査請求 未請求 請求項の数3(全5頁)

(21)出願番号 特願平4-219474

(22)出願日 平成4年(1992)8月18日

(71)出願人 000000918

花王株式会社

東京都中央区日本橋茅場町1丁目14番10号

(72)発明者 川口 喜子

栃木県宇都宮市東宿郷3-9-8

(72)発明者 植田 治三

栃木県宇都宮市越戸町117

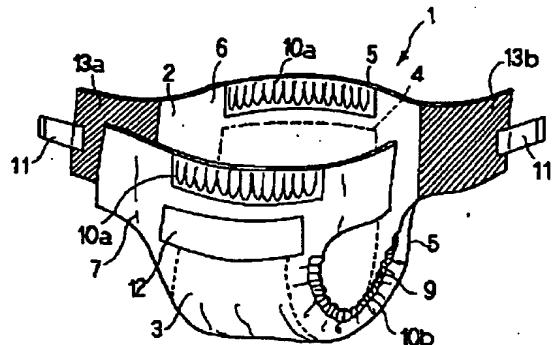
(74)代理人 弁理士 羽鳥 修

(54)【発明の名称】 使い捨ておむつ

(57)【要約】

【目的】 幼児による引き剥がしが困難であり且つ着用が容易であるとともに廃棄が容易で、更に着用者の体格に応じたサイズ調節が可能な使い捨ておむつの提供。

【構成】 本発明の使い捨ておむつ1は、液透過性の表面シート2と液不透過性の防漏シート3とこれら両シート間に位置する吸収体4とを有するおむつ本体5を備え、該おむつ本体5には、腹側部6及び背側部7それぞれのウエスト部8並びにレッグ部9、9にギャザーを形成する弾性伸縮部材10a、10bが配置され、且つ該おむつ本体5には、ファスニングテープ11及び該ファスニングテープ11が貼着されるテープ被着領域12が設けられており、上記腹側部6、6には、その両側部それぞれにパネル状の弾性耳片13a、13bがその一端部において固定され、該弾性耳片13a、13bそれぞれの他端部にファスニングテープ11が接着固定され、上記背側部7にターゲットテープ(テープ被着領域)12が設けられている。



## 【特許請求の範囲】

【請求項1】 液透過性の表面シートと液不透過性の防漏シートとこれら両シート間に位置する吸収体とを有するおむつ本体を備え、該おむつ本体には、腹側部及び背側部それぞれのウエスト部並びにレッグ部にギャザーを形成する弹性伸縮部材が配置され、且つ該おむつ本体には、ファスニングテープ及び該ファスニングテープが貼着されるテープ被着領域が設けられている使い捨ておむつにおいて、

上記腹側部の両側縁部それぞれに一对の弹性耳片が設けられ、該弹性耳片それぞれの他端部に上記ファスニングテープが接着固定され、且つ上記背側部に上記テープ被着領域が設けられていることを特徴とする使い捨ておむつ。

【請求項2】 液透過性の表面シートと液不透過性の防漏シートとこれら両シート間に位置する吸収体とを有するおむつ本体を備え、該おむつ本体には、腹側部及び背側部それぞれのウエスト部並びにレッグ部にギャザーを形成する弹性伸縮部材が配置され、且つ該おむつ本体には、ファスニングテープ及び該ファスニングテープが貼着されるテープ被着領域が設けられている使い捨ておむつにおいて、

上記腹側部の両側縁部それぞれに一对の弹性耳片が設けられ、一方の弹性耳片の他端部は上記背側部の側縁部に接合され、他方の弹性耳片の他端部に上記ファスニングテープが固定され、且つ上記背側部に上記テープ被着領域が設けられていることを特徴とする使い捨ておむつ。

【請求項3】 上記腹側部及び上記背側部それぞれには、上記ウエスト部及び上記レッグ部の間に位置する脛面部にギャザーを形成する弹性伸縮部材が設けられることを特徴とする請求項1又は2に記載の使い捨ておむつ。

## 【発明の詳細な説明】

## 【0001】

【産業上の利用分野】本発明は、幼児用、失禁者用の使い捨ておむつ、特に、着用時にファスニングテープをテープ被着領域に貼着しておむつ本体を着用者に保持する使い捨ておむつに関する。

## 【0002】

【従来の技術】この種の使い捨ておむつにおいては、液透過性の表面シートと液不透過性の防漏シートとこれら両シート間に位置する吸収体とからなるおむつ本体を、ファスニングテープ（止着テープ）にて着用者に止着して保持している。そして、ファスニングテープは、おむつ本体の背側部にその基端部が固定され、おむつ本体の腹側部に配置されたテープ被着領域（ターゲットテープ）に、ファスニングテープの先端部分を止着するようになっている。

## 【0003】

【発明が解決しようとする課題】しかし、上述した従来

の使い捨ておむつは、ファスニングテープが背側部にあり、テープ被着領域が腹側部にあるため、幼児が高月齢児であると、腹側部に手が届いてファスニングテープをテープ被着領域から引き剥がしてしまうという問題点がある。また、着用時には、乳児はともかく、四つんばいではいはいをする幼児においては、しばしの間も仰向けてになってじっとしていられない場合があり、かかる場合には、着用者におむつ本体をあてた状態でファスニングテープを腹側のテープ被着領域に止着することがはなはだ困難となる。一方、使い捨ておむつを止着するファスニングテープを必要としないわゆるパンツ型の使い捨ておむつが知られているが、該パンツ型の使い捨ておむつは、ファスニングテープがないために排便後に丸めて廃棄することが難しく、特に排便の時には便処理に手間どるという問題点があり、且つ着用者の体格に応じたサイズ調節が困難という問題点がある。

【0004】従って、本発明の目的は、幼児による引き剥がしが困難であり且つ着用が容易であるとともに廃棄が容易で、更に着用者の体格に応じたサイズ調節が可能な使い捨ておむつを提供することである。

## 【0005】

【課題を解決するための手段】本発明は、液透過性の表面シートと液不透過性の防漏シートとこれら両シート間に位置する吸収体とを有するおむつ本体を備え、該おむつ本体には、腹側部及び背側部それぞれのウエスト部並びにレッグ部にギャザーを形成する弹性伸縮部材が配置され、且つ該おむつ本体には、ファスニングテープ及び該ファスニングテープが貼着されるテープ被着領域が設けられている使い捨ておむつにおいて、上記腹側部の両側縁部それぞれに一对の弹性耳片が設けられ、該弹性耳片それぞれの他端部に上記ファスニングテープが接着固定され、且つ上記背側部に上記テープ被着領域が設けられていることを特徴とする使い捨ておむつを提供することにより上記目的を達成したものである。

## 【0006】

【作用】本発明による使い捨ておむつの着用時には、着用者のうつ伏せまたは四つんばい（いわゆる「いはいはい」）あるいは幼児を介護者に背を向けて座らせた状態または立たせた状態で、着用者におむつ本体を当て、腹側部のファスニングテープを背側部の被着領域に止着する。また、予め、ファスニングテープを被着領域に止着しておき、下着のようにはかせることもできる。着用中においては、ファスニングテープが腹側に設けられ、背側部で止着するようになっているので、幼児等にファスニングテープの止着部に手が届かず、自ら剥がすことがない。幼児の腹周長は背側部よりも腹側部の方が変動が激しく、装着中はファスニングテープの腹側に応力がかかるが、本発明の使い捨ておむつでは、ファスニングテープが腹側に固定点、背側に止着点があるので、活動が激しい状態にあっても、応力は必ずファスニングテープ

の固定点で緩和されるのではそれにくい。また、排便時には丸めた使い捨ておむつをファスニングテープでとめて廃棄する。

## 【0007】

【実施例】以下に、添付図面の図1～図5を参照して、本発明の実施例を詳細に説明する。図1は本発明の実施例による使い捨ておむつを腹側部から見た状態の斜視図、図2は本発明の実施例による使い捨ておむつを背側部から見た状態の斜視図、図3は図1に示す使い捨ておむつを展開した状態の斜視図、図4は本発明の他の実施例による使い捨ておむつの斜視図、図5は本発明の更に他の実施例による使い捨ておむつの斜視図である。

【0008】本実施例の使い捨ておむつ1は、図1～図3に示すように、液透過性の表面シート2と液不透過性の防漏シート3とこれら両シート間に位置する吸収体4とを有するおむつ本体5を備え、該おむつ本体5には、腹側部6及び背側部7それぞれのウエスト部8並びにレッグ部9、9が配置されている。上記腹側部6、6には、その両側部それぞれにパネル状の弾性耳片13a、13bがその一端部において固定され、該弾性耳片13a、13bそれぞれの他端部にファスニングテープ11が接着固定され、上記背側部7にターゲットテープ(テープ被着領域)12が設けられている。

【0009】おむつ本体5は、着用者の腹側に位置するべき腹側部6、背側に位置するべき背側部7、股下に位置するべき股下部15が形成されている。腹側部6と背側部7とは略同寸法であるが、高月齢用または失禁者用にあっては背側部7側が多少幅広の寸法に形成されていてよい。また、おむつ本体5には、着用時に着用者のウエスト周囲を囲むウエスト部8と、両足の周囲をそれぞれ囲むレッグ部9、9が形成されており、ウエスト部8に第1弾性伸縮部材10a及びレッグ部9、9には第2弾性伸縮部材10a、10bが張設され、それぞれウエストギャザー及びレッグギャザーが形成されている。

【0010】腹側部6のサイドラップ(両側部)7a、7bには、パネル状に形成された弾性耳片13a、13bの一端部が固定されており、該弾性耳片13a、13bの他端部側ファスニングテープ11が接着固定されている。弾性耳片13a、13bは、略四角形形状に形成されており、着用者のウエスト側部に伸縮自在に配置され、ウエスト部のフィット性が高められている。この弾性耳片13a、13bの寸法は、着用対象者のサイズによって異なるが、幅Hは好ましくは20～80mm、特に好ましくは30～50mm、長さLは好ましくは20～80mm、特に好ましくは30～50mmである。弾性耳片13a、13bには、それぞれファスニングテープ11、11の基端部が固定されている。このファスニングテープ11、11の先端部には粘着剤が塗布されており、下記するターゲットテープ12に貼着するようになっている。弾性耳片13a、13bは、略四角形形状に

形成されており、着用者のウエスト側部に位置される。おむつ本体5の背側部7には、その防漏シート3に四角形形状のターゲットテープ12が防漏シート3に接合固定されている。

【0011】次に、本実施例による使い捨ておむつの各構成部分の材料等について説明する。上記表面シート2は、排泄物を吸収体4へ透過させる液透過性シートで肌着に近い感触を有したもののが好ましく、このような液透過性シートとしては、例えば、織布、不織布、多孔性フィルム等が用いられる。

【0012】防漏シート3は、熱可塑性樹脂にフィラーを加えて延伸した液不透過性且つ蒸気を透過させる蒸気透過性のフィルムシート、または纖維集合体が用いられる。

【0013】吸収体4は、解纖バルブを主材とし、高分子吸水ポリマーを併用したものが好ましく、その他、熱可塑性樹脂、セルロース纖維、あるいは高分子吸水ポリマーの混合物に熱処理したものが好ましい。高分子吸水ポリマーの存在位置は上層、中層、下層のいずれであってもよく、バルブと混合したものであってもよい。高分子吸水ポリマーは自重の20倍以上の液体を吸収して保持する性能を有し、ゲル化する性質を有する粒子状のものが好ましく、このような高分子吸水ポリマーとしては、デンプンーアクリル酸(塩)グラフト共重合体のケン化物、ナトリウムカルボキシメチルセルロースの架橋物、アクリル酸(塩)重合体等が好ましい。

【0014】第1、第2弾性部材10a、10bは、それぞれ200%以上の伸縮率を有し、天然ゴム、合成ゴム、発泡ポリウレタンなどからなる複数本の糸状体としてまたは帯状体として表面シート2と防漏シート3とに連続的に接合されている。弾性耳片13a、13bは、腹側のサイドラップにおいて、表面シートと防漏シートとの間に天然ゴムや発泡ポリウレタン等の弾性部材を設けるか、あるいは前記弾性部材またはフィルムや不織布との積層体を腹側の両側縁部に接合することが好ましい。

【0015】テープ6の粘着剤は、通常の粘着剤、例えば、スチレン-ブタジエンブロック共重合体、スチレン-イソブレンブロック共重合体、アクリル酸エステル、40 アクリル共重合体、酢酸ビニル、エチレン-酢酸ビニル共重合体等のホットメルト樹脂あるいはエマルジョンが用いられる。

【0016】上述のように構成された本実施例の使い捨ておむつ1は、着用時には、着用者のうつ伏せまたは四つんばい(はいはい)あるいは幼児を介護者に背を向けて座らせた状態または立たせた状態で、若しくは立位の状態で、着用者におむつ本体5を当て、腹側部6のファスニングテープ11を背側部7のターゲットテープ12に止着する。従って、着用時に着用者を仰向けに保持する必要がないので、容易に着用できる。また、予め、フ

アスニングテープを被着領域に止着しておき、下着のようにはかせることもできる。更に、着用時には、着用者の体格やサイズに応じてファスニングテープ11の貼着位置を、ターゲットテープ12の領域内で調節できるので、サイズ調節が容易である。

【0017】着用中においては、ファスニングテープ11が腹側に設けられ、背側部7で止着するようになっているので、幼児等はファスニングテープ12の止着部に手が届かず、自ら剥がすことがない。また、幼児の腹周長は背側部よりも腹側部の方が変動が激しく、装着中はファスニングテープの腹側に応力がかかるが、ファスニングテープは腹側に固定点、背側に止着点があるので、活動が激しい状態にあっても、応力は必ずファスニングテープの固定点で緩和されるのでは無く。排便後には、ファスニングテープ11をターゲットテープ12から外し、背側部7からおむつ本体5をまるめて、ファスニングテープ11でとめて廃棄する。従って、排便をおむつ本体5に閉じ込めるので、衛生的に処理でき且つ廃棄が容易である。

【0018】本発明は上述した実施例に限定されず、本発明の要旨を逸脱しない範囲で種々変形可能である。例えば、図4に示すように、一方のパネル状の弾性耳片13aは、上記背側部の側縁部に接合され、他方の弾性耳片13aの他端部のみにファスニングテープ11の基端部が接着固定され、1個ファスニングテープ11のみをターゲットテープ12に止着する構成であってもよい。また、図5に示すように、腹側部6と背側部7において、ウエスト部8とレッグ部9との間の胴周囲部に、同周囲部にギャザーを形成する第3弾性伸縮部材10c、10cを張設するものであってもよい。このように第3弾\*30

\*性伸縮部材10c、10cを張設することによって、更に、フィット性を高め、おむつのずれ落ちを防止し、着用感も高められる。

#### 【0019】

【発明の効果】本発明の使い捨ておむつによれば、幼児による引き剥がしが困難であり且つ着用が容易であるとともに廃棄が容易で、更に着用者の体格に応じたサイズ調節が可能となる。

#### 【図面の簡単な説明】

【図1】本発明の実施例による使い捨ておむつを腹側部から見た状態の斜視図である。

【図2】本発明の実施例による使い捨ておむつを背側部から見た状態の斜視図である。

【図3】図1に示す使い捨ておむつを展開した状態の斜視図である。

【図4】本発明の他の実施例による使い捨ておむつの斜視図である。

【図5】本発明の更に他の実施例による使い捨ておむつの斜視図である。

#### 【符号の説明】

1 使い捨ておむつ

2 表面シート

3 防漏シート

4 吸収体

6 腹側部

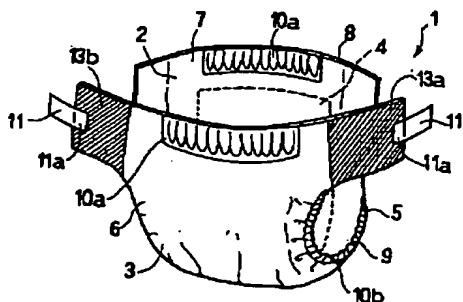
7 背側部

11 ファスニングテープ

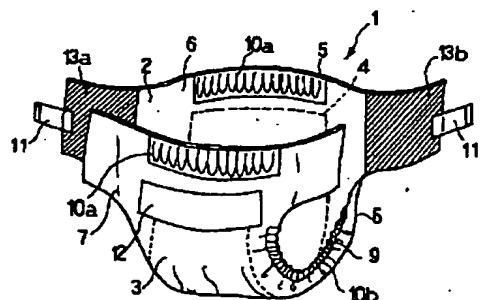
12 ターゲットテープ（テープ被着領域）

13a、13b 弾性耳片

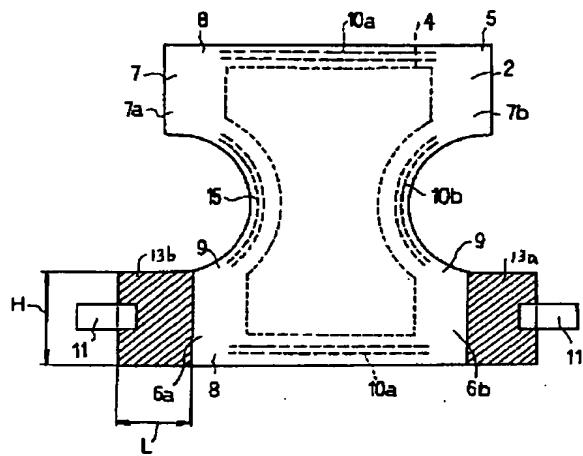
【図1】



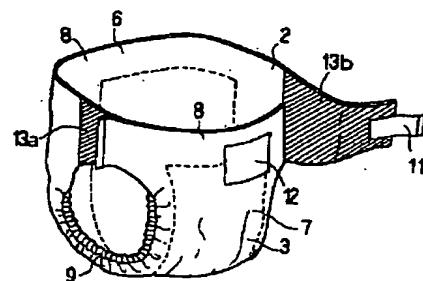
【図2】



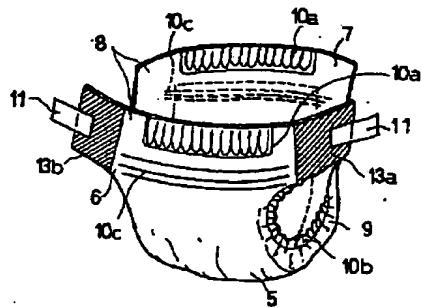
【図3】



【図4】



【図5】





# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 06-063077  
(43)Date of publication of application : 08.03.1994

(51)Int.Cl. A61F 13/58  
A61F 5/44

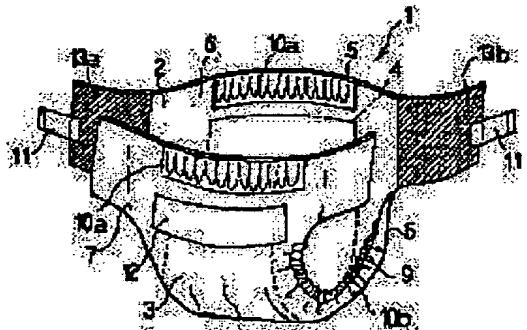
(21)Application number : 04-219474 (71)Applicant : KAO CORP  
(22)Date of filing : 18.08.1992 (72)Inventor : KAWAGUCHI HARUKO  
TOIDA HARUZO

## (54) DISPOSABLE DIAPER

### (57)Abstract:

**PURPOSE:** To provide the disposable diaper which cannot be peeled off easily by an infant, and also, can be put on easily, and moreover, can be thrown away easily, and furthermore, can be adjusted as to its size in accordance with physique of a wearer.

**CONSTITUTION:** The disposable diaper 1 is provided with a diaper main body 5 having a liquid permeable surface sheet 2, a liquid impermeable leakage preventive sheet 3, and an absorbent 4 positioned between both these sheets, and in the diaper main body 5, elastic/flexible members 10a, 10b for forming gathers in the waist part and leg parts 9, 9 of a belly side part 6 and a back side part 7, respectively are arranged, and also, in the diaper main body 5, a fastening tape 11 and a tape sticking area 12 to which the fastening tape 11 is stuck are provided. Moreover, in the belly side parts 6, 6, pane-like elastic lug pieces 13a, 13b are fixed to each of both its side parts in its one end part, and to the other end part of each of the elastic lug pieces 13a, 13b, the fastening tape 11 is stuck and fixed, and in the back side part 7, a target tape (tape sticking area) 12 is provided.



## LEGAL STATUS

[Date of request for examination] 11.01.1999

[Date of sending the examiner's decision of rejection] 26.06.2001

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection] 2001-12938

[Date of requesting appeal against examiner's decision of rejection] 24.07.2001

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office

\* NOTICES \*

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

CLAIMS

---

[Claim(s)]

[Claim 1] It has the main part of a diaper which has the absorber located between the surface sheet of liquid permeability, the watertight sheet of liquid impermeability, and both [ these ] sheets. on this main part of a diaper The elastic flexible member which forms gathers in the waist section and the leg section of the venter section and each back is arranged. on this main part of a diaper In the disposable diaper with which the tape covering field on which a farce NINGU tape and this farce NINGU tape are stuck is prepared the piece of an elastic ear of a couple prepares in each edges-on-both-sides section of the above-mentioned venter section -- having -- this piece of an elastic ear -- the disposable diaper characterized by carrying out adhesion fixation of the above-mentioned farce NINGU tape at each other end, and establishing the above-mentioned tape covering field in the above-mentioned back

[Claim 2] It has the main part of a diaper which has the absorber located between the surface sheet of liquid permeability, the watertight sheet of liquid impermeability, and both [ these ] sheets. on this main part of a diaper The elastic flexible member which forms gathers in the waist section and the leg section of the venter section and each back is arranged. on this main part of a diaper In the disposable diaper with which the tape covering field on which a farce NINGU tape and this farce NINGU tape are stuck is prepared The piece of an elastic ear of a couple is prepared in each edges-on-both-sides section of the above-mentioned venter section, and the other end of one piece of an elastic ear is joined to the side edge section of the above-mentioned back. The disposable diaper characterized by fixing the above-mentioned farce NINGU tape to the other end of the piece of an elastic ear of another side, and establishing the above-mentioned tape covering field in the above-mentioned back.

[Claim 3] The disposable diaper according to claim 1 or 2 characterized by preparing the elastic flexible member which forms gathers in \* located between the above-mentioned waist section and the above-mentioned leg section in the above-mentioned venter section and each above-mentioned back.

---

[Translation done.]

## \* NOTICES \*

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

## DETAILED DESCRIPTION

---

### [Detailed Description of the Invention]

#### [0001]

[Industrial Application] this invention relates to the object for small children, the disposable diaper for \*\*\*\* persons, and the disposable diaper that sticks a farce NINGU tape on a tape covering field at the time of wear, and holds the main part of a diaper to a wearer especially.

#### [0002]

[Description of the Prior Art] In this kind of disposable diaper, on the farce NINGU tape (firm attachment tape), the main part of a diaper which consists of an absorber located between the surface sheet of liquid permeability, the watertight sheet of liquid impermeability, and both [ these ] sheets is attached firmly to a wearer, and is held. And the end face section is fixed to the back of the main part of a diaper, and a farce NINGU tape attaches a part for the point of a farce NINGU tape firmly to the tape covering field (target tape) arranged at the venter section of the main part of a diaper.

#### [0003]

[Problem(s) to be Solved by the Invention] However, since the conventional disposable diaper mentioned above has a farce NINGU tape in the back and a tape covering field is in the venter section, it has the trouble of a hand reaching the venter section as a small child is the Takatsuki \*\*\*\*, and tearing off a farce NINGU tape from a tape covering field. Moreover, it becomes very difficult to attach a farce NINGU tape firmly to the tape covering field of a venter, where while for a while may become on its back in the small child who there is on all fours at the time of wear aside from the suckling, and does a pile, it may not keep still and the main part of a diaper is applied at a wearer in this case. Although the so-called trousers type disposable diaper which, on the other hand, does not need the farce NINGU tape which attaches a disposable diaper firmly is known, there is a trouble of taking time in facilities processing when it is difficult to round off and discard after defecating, since a these trousers type disposable diaper does not have a farce NINGU tape and is especially defecation, and there is a trouble that the size regulation according to a wearer's physique is difficult.

[0004] Therefore, the purpose of this invention is offering the disposable diaper which can be size adjusted according to a small child, having corresponded [ lengthen and \*\* is difficult to \*\*, and while wear is easy, abandonment is easy, and ] to a wearer's physique further.

#### [0005]

[Means for Solving the Problem] this invention is equipped with the main part of a diaper which has the absorber located between the surface sheet of liquid permeability, the watertight sheet of liquid impermeability, and both [ these ] sheets. on this main part of a diaper The elastic flexible member which forms gathers in the waist section and the leg section of the venter section and each back is arranged. on this main part of a diaper In the disposable diaper with which the tape covering field on which a farce NINGU tape and this farce NINGU tape are stuck is prepared Adhesion fixation of the above-mentioned farce NINGU tape is carried out at each other end. the piece of an elastic ear of a couple prepares in each edges-on-both-sides section of the above-mentioned venter section -- having -- this piece of an elastic ear -- And the above-mentioned purpose is attained by offering the disposable diaper characterized by

establishing the above-mentioned tape covering field in the above-mentioned back.

[0006]

[Function] At the time of wear of the disposable diaper by this invention, a wearer lies prone, or it is in the state where turned the back to the care worker and getting on all fours (the so-called "being yes") or the small child was sat on him, or the state made to stand, the main part of a diaper is applied to a wearer, and the farce NINGU tape of the venter section is attached firmly to the covering field of the back. Moreover, beforehand, the farce NINGU tape is attached firmly to the covering field, and it can also dispose like the arrival at the bottom. Since a farce NINGU tape is prepared during wear at a venter and it attaches firmly by the back, a hand does not reach a small child etc. at the firm attachment section of a farce NINGU tape, and it does not remove itself. Although the venter section of change is more intense than the back and an infantile belly circumference requires stress for the venter of a farce NINGU tape during wearing, since a farce NINGU tape is in a venter and an attaching firmly firmly point is in the fixed point and a backside in the disposable diaper of this invention, even if an intense state has activity, stress cannot shift easily by being first eased by the fixed point of a farce NINGU tape.

Moreover, at the time of defecation, the disposable diaper rounded off is stopped and discarded on a farce NINGU tape.

[0007]

[Example] Below, with reference to drawing 1 of an accompanying drawing – drawing 5, the example of this invention is explained in detail. The perspective diagram in the state where drawing 1 looked at the disposable diaper by the example of this invention from the venter section, the perspective diagram in the state where drawing 2 looked at the disposable diaper by the example of this invention from the back, the perspective diagram in the state where drawing 3 developed the disposable diaper shown in drawing 1, the perspective diagram of the disposable diaper by the example of everything [ drawing 4 ] but this invention, and drawing 5 are the perspective diagrams of the disposable diaper by the example of further others of this invention.

[0008] the main part 5 of a diaper which has the absorber 4 located between the surface sheet 2 of liquid permeability, the watertight sheet 3 of liquid impermeability, and both [ these ] sheets as the disposable diaper 1 of this example is shown in drawing 1 – drawing 3 — having — this main part 5 of a diaper — the venter section 6 and the back 7 — each waist section 8 and the leg sections 9 and 9 are arranged the panel-like pieces 13a and 13b of an elastic ear fix to the above-mentioned venter sections 6 and 6 in the end section at each of the both-sides section — having — these pieces 13a and 13b of an elastic ear — adhesion fixation of the farce NINGU tape 11 is carried out at each other end, and the target tape (tape covering field) 12 is formed in the above-mentioned back 7

[0009] The venter section 6 to which the main part 5 of a diaper should be located in a wearer's venter, the back 7 which should be located in a backside, and the length-from-the-crotch-to-the-cuff section 15 which should be located in length from the crotch to the cuff are formed. Although the venter section 6 and the back 7 are \*\*\*\* sizes, if it is the object for the Takatsuki age, or for \*\*\*\* persons, the back 7 side may be somewhat formed in the broad size. moreover, the waist section 8 which surrounds a wearer's circumference of the waist at the time of wear, and the leg sections 9 and 9 which surround the circumference of both legs, respectively form in the main part 5 of a diaper — having — \*\*\*\* — the waist section 8 — the 1st elastic expansion and contraction — member 10a and the leg sections 9 and 9 — the 2nd elastic expansion and contraction — Members 10a and 10b are stretched and waist gathers and leg gathers are formed, respectively

[0010] The end section of the pieces 13a and 13b of an elastic ear formed in the shape of a panel is being fixed to the side flaps (both-sides section) 7a and 7b of the venter section 6, and adhesion fixation of the other end side farce NINGU tape 11 of these pieces 13a and 13b of an elastic ear is carried out. The pieces 13a and 13b of an elastic ear are formed in the abbreviation square configuration, it is arranged elastically and the fit nature of the waist section is raised to a wearer's waist flank. Although the size of these pieces 13a and 13b of an elastic ear changes with a wear candidate's sizes, width of face H is 30–50mm, and length L is 30–50mm especially preferably 20–80mm preferably especially preferably 20–80mm. The end face section of the farce

NINGU tapes 11 and 11 is being fixed to the pieces 13a and 13b of an elastic ear, respectively. The binder is applied to the point of these farce NINGU tapes 11 and 11, and it sticks on the target tape 12 which carries out the following. The pieces 13a and 13b of an elastic ear are formed in the abbreviation square configuration, and are located in a wearer's waist flank.

Junction fixation of the target tap 12 of a square configuration is carried out to the back 7 of the main part 5 of a diaper at the watertight sheet 3 at the watertight sheet 3.

[0011] Next, the material of each component of the disposable diaper by this example etc. is explained. The above-mentioned surface sheet 2 has a desirable thing with the feel near an underwear with the liquid permeability sheet which makes excrement penetrate to an absorber 4, and textile fabrics, a nonwoven fabric, a porous film, etc. are used as such a liquid permeability sheet, for example.

[0012] The film sheet or the fiber aggregate of the steamy permeability which makes the liquid impermeability and steam which the watertight sheet 3 added the filler at thermoplastics, and were extended penetrate is used.

[0013] As for an absorber 4, what made \*\*\* pulp the main material and used macromolecule water absorption polymer together is desirable, in addition what was heat-treated into the mixture of thermoplastics, cellulose fiber, or macromolecule water absorption polymer is desirable. Macromolecule water absorption polymer's existence positions may be the upper layer, a middle lamella, and lower layer any, and may be mixed with pulp. It has the performance which absorbs and holds the liquid of 20 times or more of a self-weight, macromolecule water absorption polymer has the desirable particle-like thing which has the property to gel, and the saponification object of a starch-acrylic-acid (salt) graft copolymer, the bridge formation object of a sodium carboxymethyl cellulose, its acrylic-acid (salt) polymer, etc. are desirable as such macromolecule water absorption polymer.

[0014] The 1st and the 2nd elastic member 10a and 10b have 200% or more of degree of shrinkage, respectively, and are continuously joined to the surface sheet 2 and the watertight sheet 3 as a band form as two or more filaments which consist of natural rubber, synthetic rubber, foaming polyurethane, etc. As for the pieces 13a and 13b of an elastic ear, in the side flap of a venter, it is desirable to prepare elastic members, such as natural rubber and firing polyurethane, between a surface sheet and a watertight sheet, or to join a layered product with the aforementioned elastic member or a film, or a nonwoven fabric to the edges-on-both-sides section of a venter.

[0015] A hot-melt resin or emulsions, such as a binder usual in the binder of a tape 6, for example, a styrene butadiene block copolymer, a styrene isoprene block copolymer, an acrylic ester, an acrylic copolymer, vinyl acetate, and an ethylene vinyl acetate copolymer, are used.

[0016] At the time of wear, a wearer lies prone, or the disposable diaper 1 of this example constituted as mentioned above is in the state where turned the back to the care worker and getting on all fours (being yes) or the small child was sat on him, or the state made to stand, or is in the state of a standing position, applies the main part 5 of a diaper to a wearer, and attaches firmly the farce NINGU tape 11 of the venter section 6 to the target tape 12 of the back 7. Therefore, since it is not necessary to hold a wearer on its back at the time of wear, it can wear easily. Moreover, beforehand, the farce NINGU tape is attached firmly to the covering field, and it can also dispose like the arrival at the bottom. Furthermore, at the time of wear, since the attachment position of the farce NINGU tape 11 can be adjusted in the field of the target tape 12 according to a wearer's physique and size, size regulation is easy.

[0017] Since the farce NINGU tape 11 is formed during wear at a venter and it attaches firmly by the back 7, a hand does not reach the firm attachment section of the farce NINGU tape 12, and a small child etc. does not remove himself. Moreover, although the venter section of change is more intense than the back and an infantile belly circumference requires stress for the venter of a farce NINGU tap during wearing, since the fixed point has in a venter and a farce NINGU tape has an attaching firmly point in a backside, even if an intense state has activity, stress cannot shift easily by being first eased by the fixed point of a farce NINGU tape. After defecation, the farce NINGU tape 11 is removed from the target tape 12, and from the back 7, the main part 5 of a diaper is stopped on \*\* and the farce NINGU tape 11 in slight roundness,

and is discarded. Therefore, since defecation is confined in the main part 5 of a diaper, it can process sanitarily and abandonment is easy.

[0018] this invention is not limited to the example mentioned above, but can deform variously in the range which does not deviate from the summary of this invention. For example, as shown in drawing 4, piece of elastic ear 13a of the shape of one panel may be composition which it is joined to the side edge section of the above-mentioned back, and adhesion fixation of the end face section of the farce NINGU tape 11 is carried out only at the other end of piece of elastic ear 13a of another side, and attaches only the one-piece farce NINGU tape 11 firmly to the target tape 12. moreover, the 3rd elastic expansion and contraction which form gathers in the circumference [ drum ] section between the waist section 8 and the leg section 9 in the venter section 6 and the back 7 at the circumference [ said ] section as shown in drawing 5 -- you may stretch Members 10c and 10c the [ thus, ] -- 3 elastic expansion and contraction -- by stretching Members 10c and 10c, further, fit nature is raised, the gap omission of a diaper is prevented, and a feeling of wear is also raised

[0019]

[Effect of the Invention] According to the disposable diaper of this invention, the size regulation by the small child corresponding [ lengthen and \*\* is difficult to \*\*, and while wear is easy, abandonment is easy, and ] to a wearer's physique further is attained.

---

[Translation done.]

\* NOTICES \*

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

DESCRIPTION OF DRAWINGS

---

[Brief Description of the Drawings]

[Drawing 1] It is a perspective diagram in the state where the disposable diaper by the example of this invention was seen from the venter section.

[Drawing 2] It is a perspective diagram in the state where the disposable diaper by the example of this invention was seen from the back.

[Drawing 3] It is a perspective diagram in the state where the disposable diaper shown in drawing 1 was developed.

[Drawing 4] It is the perspective diagram of the disposable diaper by other examples of this invention.

[Drawing 5] It is the perspective diagram of the disposable diaper by the example of further others of this invention.

[Description of Notations]

1 Disposable Diaper

2 Surface Sheet

3 Watertight Sheet

4 Absorber

6 Venter Section

7 Back

11 Farce NINGU Tape

12 Target Tape (Tape Covering Field)

13a, 13b Piece of an elastic ear

---

[Translation done.]

\* NOTICES \*

Japan Patent Office is not responsible for any damages caused by the use of this translation.

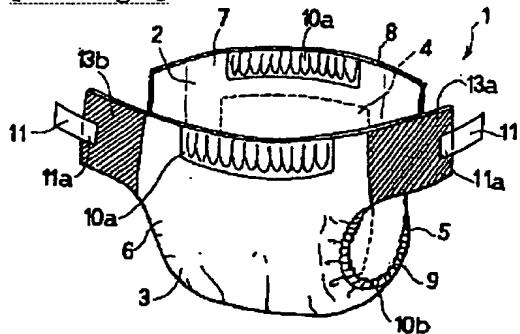
1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

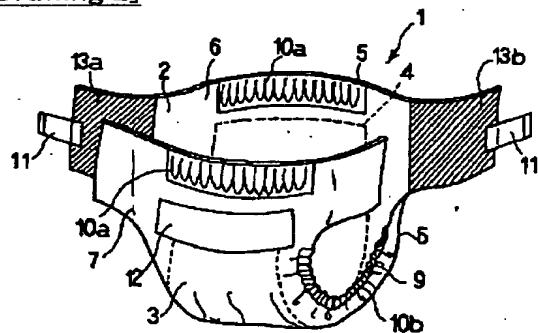
DRAWINGS

---

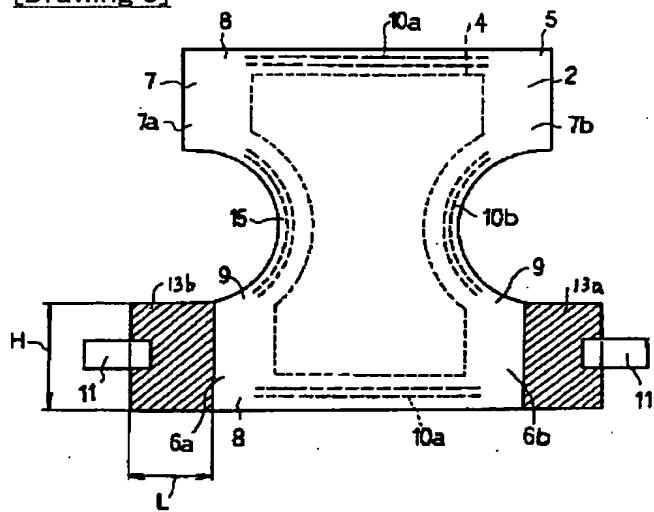
[Drawing 1]



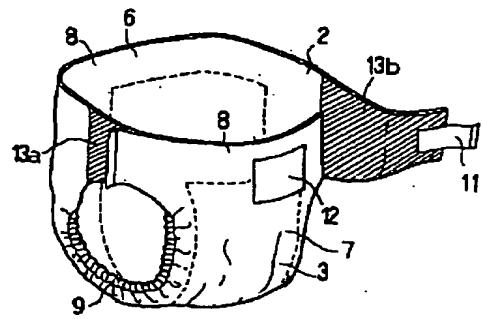
[Drawing 2]



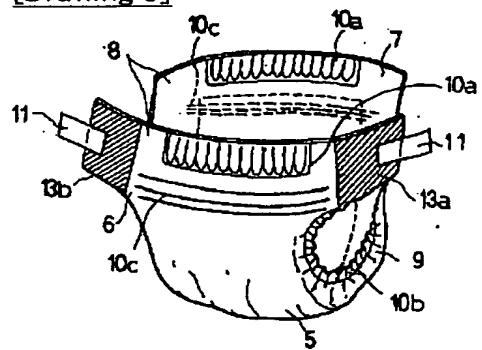
[Drawing 3]



[Drawing 4]



[Drawing 5]



---

[Translation done.]